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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/620,392	07/19/2000	Andrey A. Boukharov	04983.0130.NPUS01/38-21(5	2901

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EXAMINER

ZHOU, SHUBO

ART UNIT PAPER NUMBER

1631

DATE MAILED: 03/01/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/620,392

Applicant(s)

BOUKHAROV ET AL.

Examiner

Shubo "Joe" Zhou

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 December 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4,6-9 and 16-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4,6-9 and 16-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

Applicant's amendment and request for reconsideration in Paper #13, filed on 12/21/01, is acknowledged and the amendments entered.

Currently, claims 1-4, 6-9, and 16-20 are pending, and under consideration.

Applicant's arguments in response to the previous Office Action of 9/25/01 have been fully considered but they are not deemed to be persuasive. Rejections and/or objections not reiterated from the previous Office action are hereby withdrawn. The following rejections and/or objections are either reiterated from the previous Office action(s) or newly added, and constitute the complete set presently being applied to the instant application.

### ***Specification***

The specification is objected to because of the following:

The disclosure is objected to because it contains an embedded hyperlink and/or other form or browser-executable code. Such code is present in the specification at page 9, and/or elsewhere. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP ' 608.01.

This objection is reiterated from the previous Office action and maintained for reasons of record. Applicants amended the specifications and deleted http:// from the hyperlink browser-executable codes. However, the amended codes, while lacking http://, they are still browser-executable. As a matter of fact, the Examiner went to

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GenBank website by simply clicking the amended code

[www.ncbi.nlm.nih.gov/web/genbank/index.html](http://www.ncbi.nlm.nih.gov/web/genbank/index.html).

***Claim Rejections-35 USC § 101 and § 112***

**Claims 1-4, 6-9, and 16-20 are rejected under 35 U.S.C. 101 because the claimed invention lacks patentable utility due to its not being supported by a specific, substantial, and credible utility or, in the alternative, a well-established utility.**

This rejection is reiterated from the previous Office action and maintained for reasons of record.

Applicant argues that the specification provides specific and substantial utilities for the invention because in addition to the utilities the Examiner referred to in the previous Office action, the specification also listed other utilities including using the claimed nucleic acids for obtaining protein molecules, measuring the level of mRNA in a sample, etc. This is not found persuasive because just like the utilities referred to by the Examiner in the previous Office action, these utilities are not specific, nor substantial. As set forth on page 4 of the previous Office action, these possible uses are generic to any rice nucleic acid sequences. For example, any expressed nucleic acid molecule can be used to express a polypeptide molecule. And they are not substantial because further research has to be done to determine any real world utilities for obtaining the protein molecules, measuring the level of mRNA in a sample, etc. As set forth on page 4, such

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clear need of further research indicates that the nucleic acids are not disclosed as to a currently available substantial utility. Thus, the claimed nucleic acids are not supported by a specific and substantial asserted utility.

**Claims 1-4, 6-9, and 16-20 are also rejected under 35 U.S.C. 112, first paragraph. Specifically, since the claimed invention lacks patentable utility due to its not being supported by a specific, substantial, and credible utility or, in the alternative, a well-established utility for the reasons set forth above, one skilled in the art clearly would not know how to use the claimed invention.**

This rejection is reiterated from the previous Office action and maintained for reasons of record. Since applicant's arguments for the above rejection under 35 U.S.C. 101 are not deemed persuasive, the arguments in response to this rejection are deemed non-persuasive for the same reasons as set forth above.

**Claims 1-4, 6-9, and 16-20 are rejected, as discussed below, also under 35 U.S.C. 112, first paragraph, as containing subject matter which lacks written description in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.**

This rejection is reiterated from the previous Office action and maintained for reasons of record.

Applicants' arguments on pages 10-13 are essentially on the ground that the instant specification provides sufficient written description for the claimed invention

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because it provides detailed chemical structure for the invention and a person of ordinary skill in the art would have understood the inventor to have been in possession of the claimed invention at the time the invention was made. This is not found persuasive because as set forth in the previous Office action, there is substantial variability among the species of polynucleotides or nucleic acids encompassed within the scope of the claims because the claimed SEQ ID NO is only fragment of any full-length gene or cDNA species, or any vector due to the use of the open language "comprising" or "having". In view of the level of knowledge and skill in the art, one skilled in the art would not recognize from the disclosure that the applicant was in possession of the genus of DNAs or RNAs encompassed in claims 1-4, 6-9, and 16-20, which comprises the sequence of the claimed SEQ ID NO.

**For reasons stated above, claims 1-4, 6-9, and 16-20 are rejected under 35 U.S.C. 112, first paragraph, also because the specification, while being enabling for polynucleotides/nucleic acids of the elected SEQ ID NO:1, in claims 1-4, 6-9, and 16-20, does not reasonably provide enablement for the full breadth of the claim. Thus, the specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims.**

This rejection is reiterated from the previous Office action and maintained for reasons of record.

Applicants argue that since the examiner admits that the specification is enabling for nucleotides of elected SEQ ID NO:1, the rejection is improper. This is not deemed

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persuasive because although the specification is enabling for nucleotides of the elected SEQ ID NO:1, it does not enable nucleic acids comprising or having the elected SEQ ID NO:1 for reasons set forth above.

### ***Claim Rejections-35 USC § 102***

**Claims 1-2, and 17-18 are rejected under 35 U.S.C. § 102 (b) as being anticipated by Birren et al. (Genbank accession No. AC005922, 11/14/1998).**

Applicants argue that since the instant application claims priority to a provisional application of 60/144,351, filed 7/20/99, the rejection under 35 U.S.C. § 102 (b) is not proper. This is not found persuasive because the claimed sequence of SEQ ID NO:1 is not disclosed in 60/144,351, and the priority claim is not granted.

### ***Conclusion***

No claim is allowed.

### **THIS ACTION IS MADE FINAL.**

Applicants are reminded of the extension of time policy as set forth in 37 C.F.R. §1.136 (a). A shortened statutory period for response to this final action is set to expire three months from the date of this action. In the event a first response is filed within two months of the mailing date of this final action and the advisory action is not mailed until after the end of the three-month shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 C.F.R. §1.136 (a) will be calculated from the mailing date of the advisory

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action. In no event, however, will the statutory period for reply expire later than six months from the mailing date of this final action.

Papers related to this application may be submitted to Technical Center 1600 by facsimile transmission. Papers should be faxed to Technical Center 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993)(See 37 CFR § 1.6(d)). The CM1 Fax Center number is either (703) 308-4242 or (703)305-3014.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to:

Shubo "Joe" Zhou, Ph.D., whose telephone number is (703) 605-1158. The examiner can normally be reached on Monday-Friday from 8 A.M. to 4 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward, Ph.D., can be reached on (703) 308-4028.

Any inquiry of a general nature or relating to the status of this application should be directed to Patent Analyst Tina Plunkett whose telephone number is 703-305-3524, or to the Technical Center receptionist whose telephone number is (703) 308-0196.

S. "Joe" Zhou, Ph.D.



Patent Examiner

**MICHAEL BORIN, PH.D.**  
**PRIMARY EXAMINER**

